

VCE VET
Engineering Studies

EXTRACT

Incorporating
22019VIC Certificate II in Engineering Studies

April 2010

This program booklet is for implementation from 2010 and must be used in conjunction with the course accreditation document.

PROGRAM REVISION

This program booklet replaces the *VCE VET Engineering Studies* program booklet published in October 2004. This revision to the VCE VET Engineering Studies program is a consequence of the revision to the curriculum. For the VCE VET Engineering Studies program, the identified sets of competencies have been grouped to form Units 1 and 2 and a Units 3 and 4 sequence for recognition purposes. The recognition status of VCE VET programs and the accommodation of the requirements of assessment for study score purposes are reflected in this program booklet.

Arrangements for continuing students

Students enrolled in 21566VIC Certificate II in Engineering Studies in 2009 or earlier, may complete their program in 2010 under the arrangements outlined in the *VCE VET Engineering Studies* program booklet published in October 2004.

No new students may enrol in 21566VIC in 2010 and beyond.

Students commencing in 2010 and beyond

All students commencing the VCE VET Engineering Studies program in 2010 and beyond must comply with the requirements outlined in this booklet. A study score for this program is available.

PROGRAM DETAILS

Aims

The VCE VET Engineering Studies program aims to:

- provide pre-employment training and pathways in the engineering manufacturing or related industries and accommodate entry into the wider engineering industry
- provide students with broad-based underpinning competencies in a range of engineering skills such as basic machining, fabrication and use of tools
- provide experience in, and knowledge of a range of occupations at engineering trade level enabling students to make more informed choices in the selection of vocational career paths
- foster the development of social and personal skills relevant to participation in the engineering industry by integrating general competencies as part of the course
- enable students to gain a recognised credential and credits for further training as an apprentice or trainee.

Completion requirements for the qualification

The following information needs to be read in conjunction with the course accreditation document for *22019VIC Certificate II in Engineering Studies*.

The Certificate II in Engineering Studies consists of a total of 14 units of competence: 13 core units and one elective unit of competence to be selected from the list of electives provided.

On successful completion of this program students are eligible for the award of Certificate II in Engineering Studies.

VCE VET PROGRAM STRUCTURE

Program duration

The VCE VET Engineering Studies program has a nominal duration of 390 hours.

The nominal hours attached to each unit of competence are calculated by Skills Victoria as an indicator of the training time required to become competent. They are a guide only, and the actual duration of the training is affected by students' readiness to be assessed for the particular unit of competence.

It is important to note that the allocation of nominal hours for each unit of competence is intended to cover both delivery and assessment.

STUDY SCORE

A study score is available for the VCE VET Engineering Studies program. To be eligible for a study score students must:

- achieve all the units of competence designated as the scored Units 3 and 4 sequence
- be assessed in accordance with the tools and procedures specified in the VCE VET Assessment Guide and additional advice available from the VCE VET Engineering webpage on the VCAA website: www.vcaa.vic.edu.au/vet/programs/engineering/engineering.html
- undertake an examination in the end-of-year examination period, based on the underpinning knowledge and skills in the units of competence advised by the VCAA.

VCE VET UNIT ENTITLEMENT

Students undertaking VCE VET Engineering Studies are eligible for up to four VCE VET units on their VCE Statement of Results: up to two units at Units 1 and 2 level and a Units 3 and 4 sequence.

Students may accumulate VCE VET units over more than one year.

Program structure

22019VIC CERTIFICATE II IN ENGINEERING STUDIES

VCE VET Units 1 and 2			
Code	Unit of competence	Nominal hours	Prerequisites
Core units			
MEM13014A	Apply principles of occupational health and safety in work environment	10	–
MEM18001C	Use hand tools	20	–
MEM18002B	Use power tools/hand held operations	20	–
VBN768	Develop an individual career plan for the engineering industry	20	–
VBN769	Perform basic machining processes	40	–
VBN770	Apply basic fabrication techniques	40	–
VBN772	Use computers for engineering related work activities	20	–
VBN774	Apply basic computational principles in engineering work activities	20	–
	Subtotal	190	
VCE VET Units 3 and 4			
Compulsory units			
VBN771	Apply electrotechnology principles in an engineering work environment	20	–
VBN773	Produce basic engineering sketches and drawings	20	–
VBN776	Use basic engineering concepts to plan the manufacture of engineering components	20	–
VBN777	Handle engineering materials	20	–
VBN778	Produce basic engineering components and products using fabrication and machining	60	VBN769, VBN770, VBN773
Electives: Select ONE			
VBN779	Perform cutting, grinding and turning operations	60	VBN769, VBN770, VBN773
VBN780	Form, bend and shape engineering materials	60	VBN770
VBN781	Use fundamental refrigeration principles and processes to make refrigeration and/or air conditioning equipment operational	60	MEM18001C, MEM18002B, VBN773, VBN774
VBN782	Perform basic welding and thermal cutting processes to fabricate engineering structures	60	–
VBN783	Create engineering drawings using a computer aided system	60	VBN772, VBN773
VBN785	Assemble and test electronic engineering equipment and make it operational	60	MEM18001C, MEM18002B, VBN774
VBN786	Fabricate basic jewellery items	60	MEM18001C, MEM18002B, VBN773, VBN776
	Subtotal	200	
	TOTAL	390	